DE GASPARIS' PLANET.

"Signor De Gasparis, of the Observatory of Naples, discovered a planet about 9:10 mag. on the 12th April last, while comparing Steinheil's Map (Hora xii.) with the heavens. Unfavourable weather prevented any exact determination that night, but on the 14th and 17th comparisons were made through other stars with No. 23098 of the Histoire Céleste,* which gave the results following:—

| | Naples M.T. | R.A. | N.P.D. | | |
|-------------------|-----------------|----------|------------|--|--|
| 1849. April 14 | h m s 9 2 53 | * - 0 30 | * + 10 52" | | |
| 17 | 14 2 42 | * - 2 59 | * - 4 16 | | |

"The planet is retrograding and approaching the equator."— From Professor Schumacher's Circular.

Extract of a Letter from Professor Schumacher to the Astronomer Royal.

The following observations of Gasparis' Planet have been made at Berlin, Altona, Hamburg, and South Villa. The comparisons are with the places deduced from Encke's elements. The Mean Times are those of Berlin, Altona, Hamburg, and Greenwich, and are distinguished by the initial letter.

| | | | 100 | Correction to Elements. | | |
|-----------------|---------------|--------------|-------------|-------------------------|--------------|--|
| | | м. т. | | N.P.D. | R.A. N.P.D. | |
| 1849. May 13 | Prof. Encke | 12 19 2.5 B | 180 18 37.1 | 95 43 55'9 | ,, ,, | |
| . 15 | ,, | 11 29 26.3 B | 17 44.8 | 40 21.0 | | |
| 17 | | 10 40 33.5 A | | | - 9.5 + 14.0 | |
| | M. Sonntag | 12 15 44 A | 17 52.9 | 37 16.3 | 20.8 2.0 | |
| | M. Rümker | 10 23 13.2 H | 18 6.5 | 37 22.3 | 5 | |
| 18 | | 10 0 23.7 A | | | | |
| | " | 18 40·4 A | 18 40.5 | 35 55.7 | 14.5 — 1.2 | |
| • | M. Sonntag | 25 46°0 A | 18 38.7 | 35 59.6 | 16.5 + 3.3 | |
| | M. Rümker | 10 21 14'2 H | 18 37.7 | 36 2.2 | *** | |
| 20 | Dr. Petersen† | 10 0 25.2 A | 180 21 8.0 | | | |
| | ,, | 31 29·3 A | 21 2.1 | 33 47.6 | 50.1 10.3 | |
| | M. Sonntag | 10 38 29 A | 20 59.3 | 33 39.5 | 23.2 2.7 | |
| | M. Querling | 11 36 7 A | 21 4.6 | 33 38.0 | -25.0 + 3.6 | |
| | | 10 19 22.0 H | | | | |
| 21 | M. Sonntag | 10 40 48 A | 180 22 47.2 | 95 32 47 9 | | |
| | M. Rümker | 10 16 48.7 H | 22 37.5 | 32 44.5 | | |
| 22 | 22 | 10 28 35.5 H | 24 35.5 | 32 4.4 | | |
| 27 | Mr. Hind‡ | 9 51 45 G | 180 39 40.5 | 95 29 50.4 | | |
| _ | ooch Mag. | R.A. | An. Prec. | N.P.D. | An. Prec. | |

Virgo 81 12 9 48.64 + 3.077 97 0 48.4 + 20.04

[†] The planet faint in this comparison. ‡ Mr. Hind thought the planet rather fainter than 10 mag.

Elements.

Professor Schumacher has had the goodness to forward to the President, Professor Encke's elements of the newly-discovered planet. These elements are deduced from the observations of April 14, May 13 and 15, without taking Aberration, Nutation, Precession, Parallax into account.

Epoch 1849, May 13.5. Berlin M.T.

| | 0 / // | |
|----------------|-------------|--------------------------|
| Mean longitude | 511 8 31.1 | |
| Anomaly | 328 5 1.3 | |
| Perihelion | 243 3 29.8 | |
| Node | 286 34 31.1 | |
| Inclination | 3 46 5.9 | |
| φ | 9 50 36.8 | e 0,170959 |
| Log. a | 0.214044 | Mean daily motion 601"09 |

The Computed—Observed places are as follows:—

| | Δα | Δδ | |
|---------------|---------------|---------|----------------------------------|
| A . • • • · · | , ,, | " | • |
| April 14 | - 0.2 | ·., O*O | |
| 17 | -7 37.5 | -11.8 | error of 30° in the observation. |
| May 13 | 0.0 | - o.ı | |
| 15 | . — o.6 | + 0.3 | |
| 16 | – 4. 9 | + 3.2 | |

Ephemeris from Encke's Elements. By Mr. Graham.*

For Greenwich Mean Midnight.

| 1849. | R.A. h m s | N.P.D. | Hor. Par. | 1849. | R.A. h m s | N.P.D. | Hor. Par. |
|---------|---------------|---------|-----------|---------|---------------|---------|-----------|
| /Iay 25 | 12 2 13 | 95 30.2 | 3.95 | June 14 | 12 10 42 | 95 51.2 | |
| 26 | 2 28 | 29.9 | | 15 | 11 20 | 53.6 | 3.24 |
| 27 | 2 43 | 29.9 | | 16 | 11 58 | 56.1 | |
| 28 | 2 59 | 30.0 | 3.86 | 17 | 12 38 | 95 58.7 | • |
| 29 | 3 7 | 30.5 | | 18 | 13 19 | 96 1.2 | 3.49 |
| 30 | 3 36 | 30.2 | | 19 | 14 0 | 4*4 | |
| 31 | 3 56 | 31.0 | 3.81 | 20 | 14 42 | 7*4 | |
| June 1 | 4 17 | 31.6 | | 2 I | 15 26 | 10.4 | 3*44 |
| 2 | 4 40 | 32.3 | | 22 | 16 11 | 13.7 | |
| 3 | 5 4 | 33.1 | 3.75 | 23 | 16 56 | 17.0 | |
| 4 | 5 29 | 34.1 | | 24 | 17 42 | 20'4 | 3.39 |
| 5 | 5 55 | 35°3 | | 25 | 18 29 | 24.0 | |
| 6 | 6 22 | 36.6 | 3.69 | 26 | 19 17 | 27.7 | |
| 7 | 6 51 | 37*9 | | 27 | 20 7 | 31.4 | 3.34 |
| 8 | 7 21 | 39°4 | | 28 | 20 57 | 35°3 | |
| · 9 | 7 51 | 41.1 | 3.64 | 29 | 21 48 | 39.3 | |
| 10 | 8 23 | 42.8 | | . 30 | 22 40 | 43°3 | 3.30 |
| 11 | 8 56 | 44°7 | | July 1 | 23 33 | 47.5 | |
| 12 | 9 31 | 46.7 | 3.29 | 2 | 24 26 | 51.7 | |
| 13 | 12 10 6 | 95 48.9 | | 3 | 12 25 20 | 96 56.1 | 3.5 |

^{*} An ephemeris for every 4 days has been communicated by Mr. Breen of the Royal observatory.